

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants : Thomas C. May Confirmation no. 5892
Appln. No. : 11/808,764 Art Unit: 3775
Filed : March 25, 2004 Examiner: David W. Bates
Title : IMPLANTABLE CROSS-PIN FOR ANTERIOR CRUCIATE LIGAMENT REPAIR

I hereby certify that this correspondence is being transmitted via
The Office electronic filing system in accordance with 37 CFR 1.6(a)(4)

August 31, 2010
(Date of Transmission)

Angelina Pettif
(Name of applicant, assignee, or Registered Representative)

/Angelina Pettif/
(Signature)

August 31, 2010
(Date of Signature)

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

AMENDMENT AND RESPONSE

Dear Sir:

This paper is filed responsive to the Office Action mailed May 28, 2010 in the above-identified matter.

Amendments to the Claims are reflected in the listing of claims which begins on page 2 this paper.

Remarks/Arguments begin on page 4 of this paper.

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) An implantable cross-pin for use in an ACL repair procedure, comprising:
 - an elongated member having a proximal end, a distal end, and an outer surface;
 - a nose member extending out from the distal end of said elongated member having a proximal end and a distal end;
 - an axial trough in the elongated member extending ~~through~~ along the outer surface, said trough having a proximal end, a distal end, a bottom, opposed ends, an open top, and a passageway;
 - a guide wire opening in the distal end of the nose member and concentric with the central longitudinal axis of the elongated member;
 - an interior tunnel having a passage with an enclosed circular perimeter in the nose member extending from the guide wire opening and extending into the trough such that the passage is in communication with the guide wire opening and the trough, the interior tunnel being obliquely oriented relative to the central longitudinal axis of the elongated member; and
 - a guide wire seated in the axial trough and extending through the interior tunnel and the guide wire opening;
 - wherein the cross-pin comprises a biocompatible material.
2. (Canceled).
3. (Previously Presented) The cross-pin of claim 1, wherein the material is bioabsorbable.
4. (Canceled).
5. (Original) The cross-pin of claim 3, wherein the bioabsorbable material is selected from the group consisting of PLA, PGA, and copolymers thereof.
6. (Canceled).

7. (Original) The cross-pin of claim 1, wherein the proximal end of the cross-pin comprises an opening in communication with the proximal end of the trough.

8. (Cancelled).

9. (Original) The cross-pin of claim 1, wherein the nose member has a bullet shape.

10-16. (Canceled).

REMARKS

This paper is filed responsive to the Office Action mailed May 28, 2010 in the above-identified matter. Presently, claims 1, 3, 5, 7 and 9 are pending in the application. Claims 1, 3, 5, 7 and 9 stand rejected under 35 U.S.C. §103(a) over Singhatat (US Patent Publication No. 2004/0133239A1) in view of Wahl et al. (US Patent No. 6,228,086B1). Applicants traverse the rejection and request reconsideration and reexamination of the subject matter.

The Examiner objected to the claims. Applicants have corrected the typo and also by the correction clarified that the trough is on the outer surface and not a bore through the body, as is the definition of a trough.

The Examiner has rejected all of the pending claims under 35 U.S.C. §103(a) over Singhatat in view of Wahl et al. However, there is no proper suggestion or reason for making the alleged combination and even if made it fails to reach the claimed invention. Singatat teaches a suture anchor which is embedded into a bone hole and from which suture runs through adjacent soft tissue to hold that tissue to bone adjacent the bone hole. Wahl et al. teach an intramedullary nail for treatment of bone fractures. Wahl et al. lack a guide wire or any passage therefor. The Examiner state that the suture is a guide wire. Suture is not a guide wire, and moreover the suture in Singhatat is attached to the nose of the anchor; that is not how a guide wire works. Given their different uses (1 - suture anchor, 2 - nail for fracture repair, and although irrelevant for making the combination, neither is used as a cross-pin) there would be no reason to modify one with the structure of the other. The Examiner states that "it would have been obvious to one of ordinary skill in the art at the time of the invention to substitute the trough design for the enclosed portion 460 of Singhatat since doing so would have predictably achieved the result of providing an insert which need not be cannulated (for the entire length), and therefore has a smaller cross section to reduce risk of fat embolism." Is fat embolism an issue in suture anchors? It is a concern in fractures of long bones for which the Wahl et al. device is designed. One of the primary concerns with a suture anchor is pull-out strength.

Would such a modification reduce that? The teachings of these references do not clearly lead one of skill in the art to make the modifications suggested by the Examiner.

Even if the alleged combination were made the combination would not reach the claimed invention. The invention is a cross-pin. The Examiner states that Singhatat would function as such but provides no justification, but rather merely states that it is so. Singhatat is too short to function as a cross-pin and its outer ribs which provide it purchase in the bone at its intended use would only serve to weaken it in a cross-pins critical job to sustain transverse loads.

If one of skill in the art did modify Singhatat as per the Examiner's suggestion then would they put in a guide wire? If so then the Singhatat anchor would lose its suture and being a suture anchor this is a fatal flaw. If it were modified to keep the suture then it would lack the guide wire and thus not reach the presently claimed invention.

Applicants submit that the application is presently in condition for allowance and request favorable reconsideration and early notice of allowance. If it would speed prosecution, the Examiner is encouraged to contact the undersigned attorney by telephone.

Respectfully submitted,

By: /Andrew C. Farmer/
Andrew C. Farmer
Reg. No. 35,868

Johnson & Johnson
One Johnson & Johnson Plaza
New Brunswick, NJ 08933
(732) 524-2825
Dated: August 31, 2010